

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

REMARKS

Present Status of the Application

This is a full and timely response to the outstanding final Office action electronically delivered on August 2, 2007. It is regretfully acknowledged that Applicant's response previously filed on May 17, 2007 has not been deemed persuasive.

Claims 1-10 remain rejected under 35 U.S.C. Section 103(a) as being unpatentable over Pattisam et al. (USPN 5,357,614, hereinafter "Pattisam") and further in view of Karpoff et al. (USPN 6,857,059, hereinafter "Karpoff").

After carefully reviewing the Examiner's commentaries, Applicant respectfully traverses the obviousness rejection for at least the reasons furnished hereinafter, and reconsideration of those claims is courteously requested.

Discussion of Claim Rejections under 35 USC 103

Claims 1-10 remain rejected under 35 U.S.C. Section 103(a) as being unpatentable over Pattisam and further in view of Karpoff. Applicant respectfully traverses the 103 rejections of the aforesaid claims because a *prima facie* case of obviousness has not yet been established by the Office action.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. See MPEP § 2143.

With respect to independent claim 1 at issue, as originally filed, it recites in part, "A data compression/decompression device, suitable for compressing/decompressing a data transmitted between a data generation device and a data storage device, comprising:

...
a controller, coupled to said input buffer, said output buffer and said data compressor/decompressor, for controlling data transmission with said data generation device and said data storage device, controlling compressing/decompressing said data, and managing an address mapping table which is the cross reference between an access address transmitted from said data generation device and a physical address of storing the data in said data storage device." *(Emphasis added)*

In rejecting claim 1 at issue, the Examiner has interpreted that the combination of Pattisam's microprocessor 230 and the address mapping table provided in Karpoff purportedly

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

discloses the controller of the present invention. Applicant respectfully disagrees on said interpretation for at least the following ground.

As indicated in col. 11, lines 43-52 of Pattisam's specification, it reads "the controller is additionally provided with a microprocessor 230, uncompressed and compressed buffers 210, 211, 250 and flash memory 240. These added components provide an independent ... and controls the flow of data through the compression coprocessor to provide a consistent high speed throughput of data." Apparently, the microprocessor 230 of Pattisam is employed for controlling the data flow.

In addition, despite the description cited by the Examiner (col. 15, lines 42-45 of Pattisam's specification), stating "[M]icroprocessor 230 also issues starting and ending addresses to SCSI interface logic 260 such that the data are transferred directly from compressed data buffers 250 to device 280", Pattisam further discloses in col. 14, line 68 to col. 15, line 6 that "[C]ompression coprocessor 220 communicates with microprocessor 230 through compression coprocessor interface logic 216 by issuing an interrupt when compression is completed. While waiting for an interrupt from compression coprocessor 220, the microprocessor can direct application interface logic 215 to read additional data to be compressed from host channel 200." Moreover, in col. 11, lines 55-58 and col. 11, lines 61-65 of Pattisam's specification, it teaches that "[I]n particular, commands and status information are communicated between the host system 21 and the application interface logic 215 of the controller 20 via connection 205", and "[T]he buffers 210, 211, are also coupled to application interface logic 215, which maintains an

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

identification of the buffer currently accessed through connection 206 by the host system and controls access to the buffers 210, 211." In light of the foregoing, Pattisam's microprocessor 230 does not issue the starting and ending addresses to the compression coprocessor interface logic 216 and the application interface logic 215 for further operations, and thus the microprocessor 230 provided by Pattisam is not able to perform the function of the cross reference. As a matter of fact, Pattisam's teaching deviates from the scope of the present invention which utilizes the address mapping table as the "cross reference" between an access address transmitted from said data generation device and a physical address of storing the data in said data storage device. Hence, it is submitted that the microprocessor 230 of Pattisam and the controller of the present invention are operated in a different manner.

On the other hand, in col. 4, lines 28-33 of Karpoff's specification, it states, "[T]he method typically includes receiving a request from a host to perform an operation on one or more blocks of the storage system, the request including a virtual memory address, and determining from a mapping table whether memory space in the storage system has been allocated for the virtual memory address." Therefore, it is known that the mapping table disclosed by Karpoff is not equipped with the function of address transmission based on the storage capacity before or after the data compression proceeds. By contrast, in Applicant's as-filed claim 1, the controller is adopted for managing an address mapping table which is the cross reference between an access address transmitted from the data generation device and a physical address of storing the data in the data storage device, wherein the data outputted from or received by the

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

data generation device are not compressed yet, while the data provided by or inputted into the data storage device are already compressed, substantiating that the address mapping table provided in claim 1 at issue is equipped with the function of address transmission based on the storage capacity before or after the data compression proceeds.

Based on at least the reasons advanced above, neither the microprocessor 230 provided by Pattisam is able to perform the function of the cross reference, nor the mapping table taught by Karpoff is capable of performing the address transmission based on the storage capacity before or after the data compression proceeds. Consequently, it is respectfully submitted that it would have not been obvious to persons skilled in the pertinent art to combine the two teachings, rendering the controller of Applicants' claim 1 non-obvious and patentable.

In light of the foregoing, it is held that the two references combined do not teach or suggest the controller in claim 1. Thus, a *prima facie* case of obviousness for claim 1 has not been established by the Office action. Furthermore, these two prior art references do not establish any suggestion, teaching, or motivation that would have led persons of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed.

For at least the foregoing reasons, Applicant respectfully submits that independent claim 1 at issue patently defines over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-4 patently define over the prior art as well as a matter of law.

Likewise, by virtue of the above-referenced reasons at least, Applicant's claim 5 at issue should be rendered non-obvious and patentable; as a matter of law, claims 6-10 respectively

Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

depending thereupon are also allowable. Withdrawal of the rejections under 35 U.S.C. 103(a) is accordingly requested in all sincerity.

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Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-10 are in proper condition for allowance and an action to such effect is solemnly assured. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is gratefully invited to call the undersigned.

Respectfully submitted,

Date :

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